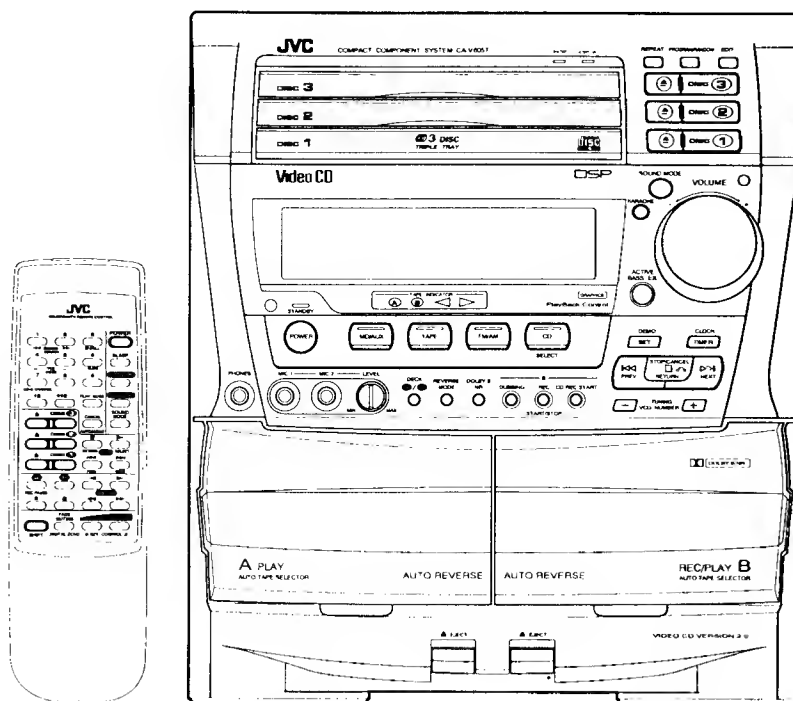# JVC

COMPACT COMPONENT SYSTEM

小型組合系統

CA-V605T

PlayBack Control   Video CD   COMPACT disc DIGITAL VIDEO   COMPACT disc DIGITAL AUDIO GRAPHICS   COMPACT disc DIGITAL AUDIO

INSTRUCTIONS
使用説明書

Warnings, Cautions and Others
警告，注意及其他須知事項

Caution — POWER switch!
Disconnect the mains plug to shut the power off completely. The POWER switch in any position does not disconnect the mains line. The power can be remote controlled.

注意 —— 電源開關！
無論電源開關在任何位置，電源線的電源還是沒有被切斷，若要將電源完全關閉，應把電源插頭拔離插座。電源可用遙控器控制。

CAUTION
To reduce the risk of electrical shocks, fire, etc.:
1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture.

注意
為了減低觸電，火災等危險：
1. 請勿擅自卸下螺絲釘，蓋子或機殼。
2. 切勿讓本機受雨淋或置潮濕環境中。

IMPORTANT FOR LASER PRODUCTS
雷射產品的重要説明

REPRODUCTION OF LABELS
標簽內容説明

① CLASSIFICATION LABEL, PLACED ON REAR ENCLOSURE

① 分類標簽，貼在機殼背後。
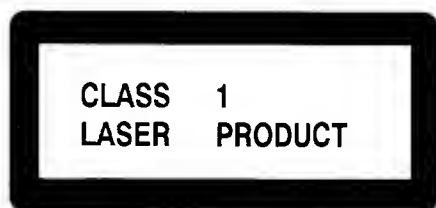
② WARNING LABEL, PLACED INSIDE THE UNIT

② 警告標簽，貼於機內。

CLASS   1
LASER   PRODUCT

DANGER: Invisible laser radiation when open and interlock failed or defeated AVOID DIRECT EXPOSURE TO BEAM. (e)	VARNING: Osyntlig laser-strålning når denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)	ADVARSEL: Usynlig laser-stråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsæt-telse for stråling (d)	VARO: Avattaessa ja suo-jalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

1. 一級雷射產品
2. 危險：當內部鎖定裝置失效或者損壞後，打開蓋板可能會產生不可見的雷射輻射。應避免受到光束直接照射。
3. 注意：請勿打開頂蓋板。本機內部沒有用戶可自行維修的部件；所有維修工作應由有資格的人員完成。

INTRODUCTIONS

**We would like to thank you for purchasing one of our JVC products.
Before operating this System,
read this manual carefully and
thoroughly to obtain the best possible performance from your System,
and retain this manual for future reference.**

About this manual

This manual is organized as follows:

- The manual mainly explains operations using the buttons and controls on the System. You can also use the buttons on the remote control if they have the same or similar names (or marks) as those on the System.
  If operation using the remote control is different from that of using the System, it is then explained.
- Basic and common information that is the same for many functions is grouped in one place, and is not repeated in each procedure. For instance, we do not repeat the information about turning on/off the System, setting the volume, changing the sound effects, and others, which are explained in the section "Common Operations" on page 10.
- The following marks are used in this manual:

  CAUTION:
  Gives you warnings and cautions to prevent from a damage or risk of fire or electric shock.
  Also gives you information which is not good for obtaining the best possible performance from the System.

  Notes:
  Gives you information and hints you had better know.

Precautions

Installation
- Install in a place which is level, dry and neither too hot or too cold — between 5°C (41°F) and 35°C (95°F).
- Install the System in a location with adequate ventilation to prevent internal heat built-up in the System.
- Leave sufficient distance between the System and the TV.
- Keep the speakers away from the TV to avoid interference with TV.

> **CAUTION**
> DO NOT install the System in a location near heat sources, or in a place subject to direct sunlight, excessive dust or vibration.

Power sources
- When unplugging from the wall outlet, always pull the plug, not the AC power cord.

> **CAUTION**
> DO NOT handle the AC power cord with wet hands.

Moisture condensation
Moisture may condense on the lens inside the System in the following cases:
- After starting the heating in the room
- In a damp room
- If the System is brought directly from a cold to a warm place
should this occur, the System may malfunction. In this case, leave the System turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

Others
- Should any metallic object or liquid fall into the System, unplug the System and consult your dealer before operating any further.
- If you are not going to operate the System for an extended period of time, unplug the AC power cord from the wall outlet.

> **CAUTION**
> DO NOT disassemble the System since there are no user serviceable parts inside.

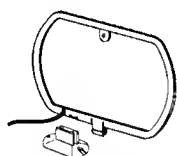If anything goes wrong, unplug the AC power cord and consult your dealer.

Table of contents

GENERAL INFORMATION

Checking supplied accessories

After unpacking, check to be sure that you have all the following items:

AM loop antenna and stand (1)

Remote control unit (1)
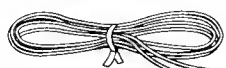
FM antenna (1)
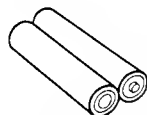
Batteries (2)

Video cord (1)

When the power plug is a flat blade type, the type A adaptor is supplied.
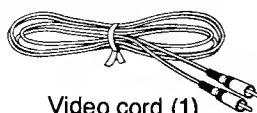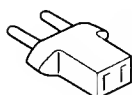
type A or type B
AC Plug Adaptor (1)
(except Hong Kong)

When the power plug is a round prong type, the type B adaptor is supplied.

If any items are missing, consult your dealer immediately.

Types of CDs you can play

Many types of compact discs are sold for a variety of uses. The Video CD Player can play the following compact discs:

*   **Video CD**
    for audio and video (moving picture) repro-
    duction, including multiplex sound.

    COMPACT
    disc
    DIGITAL VIDEO

*   **Video CD with Playback Control function**
    featuring menu-type operation and super-
    fine still pictures for audio and video (moving
    picture) reproduction, including multiplex
    sound.

    PlayBack
    Control

*   **CD Graphics (CD-G)**
    for audio and video (still picture) reproduc-
    tion, including multiplex sound.

    COMPACT
    disc
    DIGITAL AUDIO
    GRAPHICS

*   **Digital Audio CD, including single discs**
    for audio reproduction.

    COMPACT
    disc
    DIGITAL AUDIO

CDs you can't play back
Do not play back CD-ROMs on this equipment. Doing so may generate a noise which can damage your speakers.

Adjusting the voltage selector switch

Before plugging in the unit, set the correct voltage for your area with the voltage selector switch on the rear of the System.

Voltage selector switch

220V
110V
230 - 240V
127V
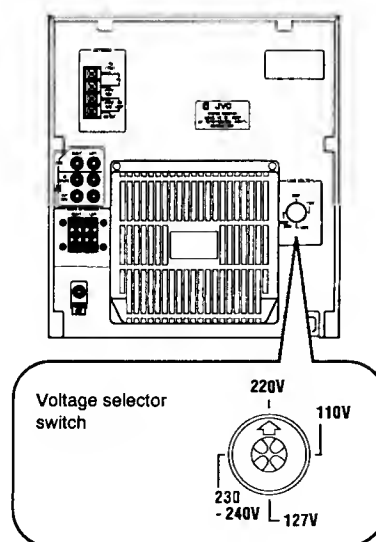
Use a screwdriver to rotate the voltage selector switch so the voltage number the arrow is pointing at is the same as the voltage where you are plugging in the System.

> **CAUTION**
> To avoid damaging CA-V605T set the voltage selector switch before plugging in the System.

Laying out the System

Leave a space of at least 1 cm on both sides of the System and at least 10 cm at the back, for ventilation.

1cm (7/16")   1cm (7/16")
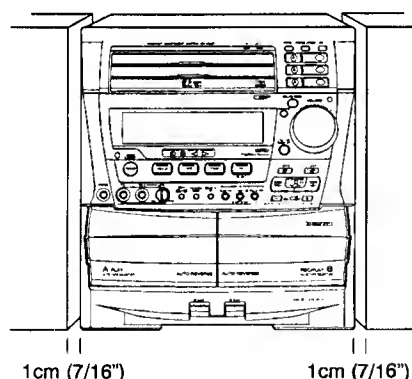
BEFORE USING FOR THE FIRST TIME

Connecting the antennas

FM antenna
Antenna preparations
You need to connect the FM antenna to the back of the System.
- Open the FM antenna wire connectors by pushing them to the side, insert the FM antenna wires, and close them by pushing them back into their original position.
- Hang the FM antenna on the wall behind the System.
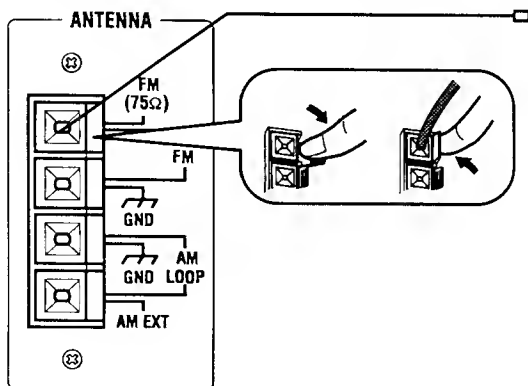
AM antenna
1. Connect the AM loop antenna to the AM LOOP terminals as illustrated.
2. Turn the AM loop antenna until you have the best reception.

To connect an outside AM antenna
When reception is poor, connect a single vinyl-covered wire to the AM EXT terminal. (The AM loop antenna must remain connected.)
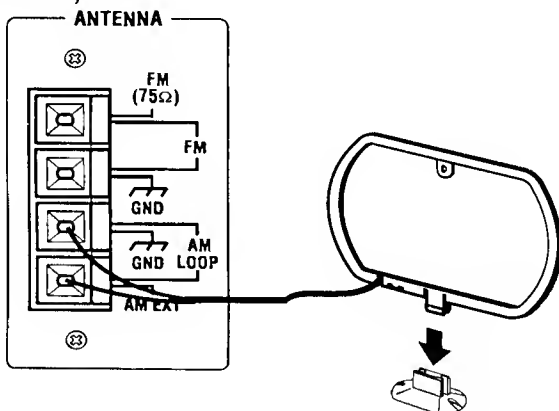
Note
For better reception of both FM and AM
Make sure the antenna conductors do not touch any other terminals or connecting cords.
Keep the antennas away from metallic parts of the System, connecting cords, and the AC power cord.

Connecting the speakers

The speaker cords are included with the speaker system.

Speaker connections
(Both speakers should be connected)
1. **Remove the insulation at the end of each cord and twist the core of the cord.**
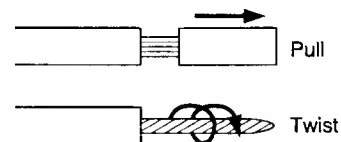
2. **Open the speaker terminal.**
3. **Insert the end of the speaker cord to the terminal.**
   For each speaker, connect one end of the speaker cord to the speaker terminals on the rear of the System. Match the polarity of the speaker terminals: Red (+) to red (+) and black (–) to black (–).
4. **Close the speaker terminal on the rear of the System or just re-lease your finger from the terminal on the speaker.**

Rear panel
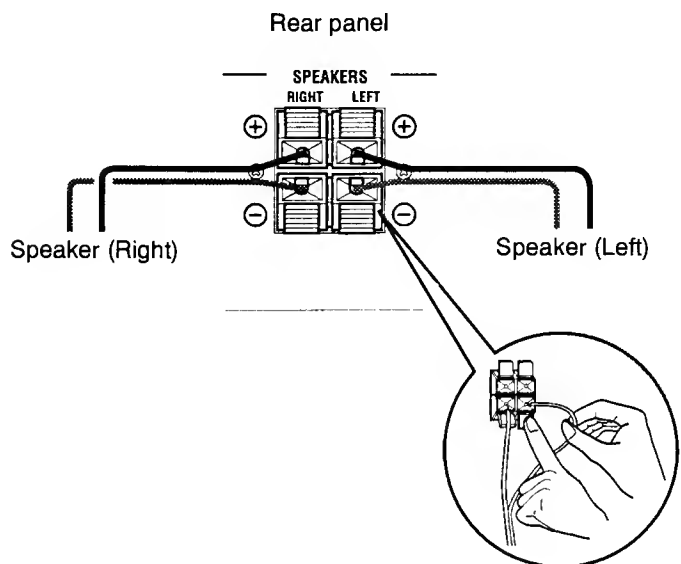
Connecting other equipment

You can connect the following equipment to this System:
*   TV with a video input jack — used as a monitor of VCR playback or video CD playback.
*   VCR — used as a sound playback and sound recording device.
*   Audio/video equipment such as a video disc player — used only as a playback device.
*   Audio equipment with an optical digital input terminal — used only as a digital recording device like MD/DCC player.

> **Caution**
> *   DO NOT connect other equipment while power is on.
> *   DO NOT plug in the AC power cord/until all connections are complete.

To connect a TV
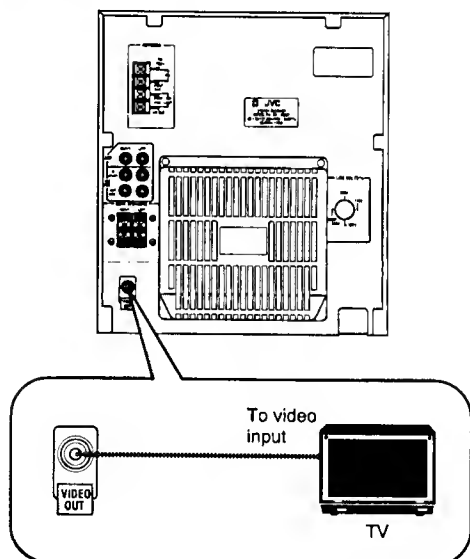
Connect the video input jack on the TV and the VIDEO OUT jack, using the supplied video cord.
To view a video CD, you need to connect an NTSC-compatible TV.

To connect audio/video equipment such as a video disc player
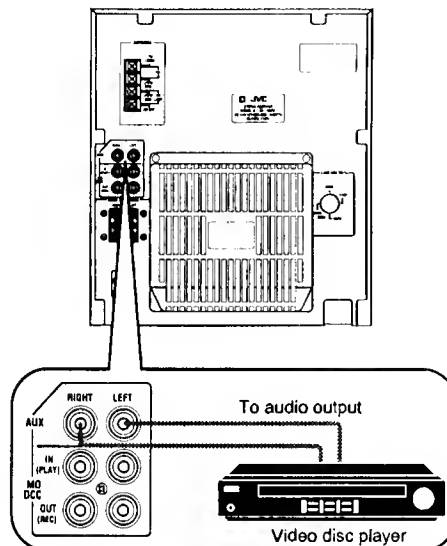
Connect the audio output jacks on the other equipment and the AUX jacks, using an audio cord (not supplied).

To connect a VCR
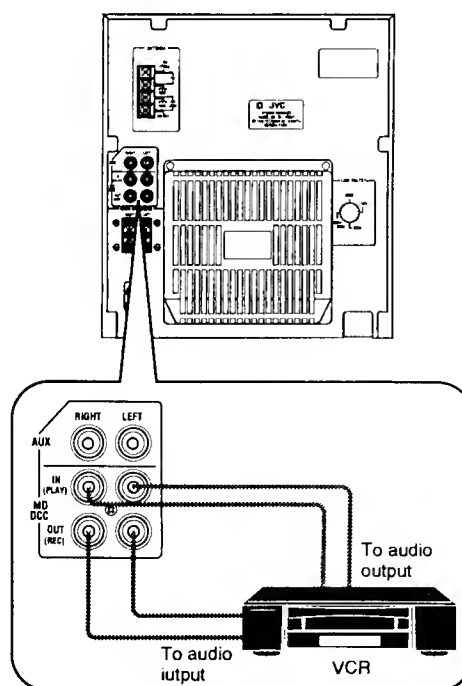
By using audio cords (not supplied), connect:
*   Between the audio input jacks on the VCR and the MD/DCC OUT (REC) jacks,
*   Between the audio output jacks on the VCR and the MD/DCC IN (PLAY) jacks.

To connect MD, DCC and DAT

You can connect the audio output terminals to the MD DCC IN (PLAY) jacks, and the audio input terminals to MD DCC OUT (REC) jacks.

Make sure to connect the wires correctly: Red to red and white to white.

To audio output

RIGHT   LEFT

AUX

IN
(PLAY)

MD
DCC

OUT
(REC)

To
audio
input   MD
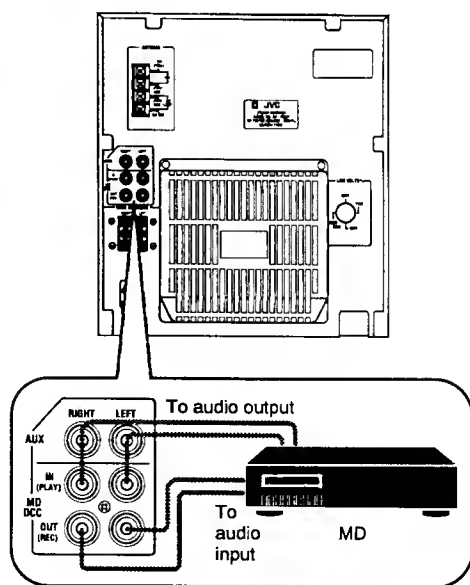
Notes
When recording onto the MD through this terminal

*   You can record only audio signals of conventional CDs and CD-Gs through this terminal.
*   It is not recommended to use the automatic marking function of the MD player since the marking signal cannot be recorded correctly between recorded tracks. It is preferable to use manual marking while recording.

Connecting the power cord

NOW, you can plug the power cord.
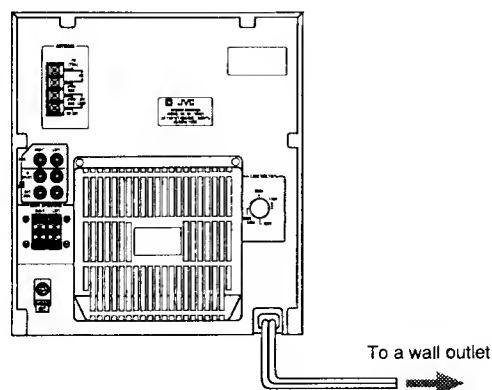
To a wall outlet

If the wall outlet does not match the AC plug, use the supplied AC plug adaptor.

When the power cord is connected, the STANDBY light on the left-hand side of the System's front panel comes on. [See "Overview of controls" for a description of the controls on the System.]

Putting the batteries into the remote control unit

The battery compartment is located on the back of the remote control.

1. **Press down on the triangular mark of the compartment cover, and slide the cover off to open the compartment.**
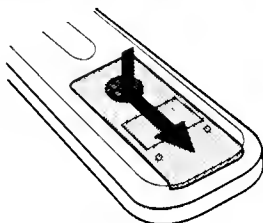
2. **Place the two accessory R6P (SUM-3)AA (15F) batteries in the remote control according to the polarity markings ("+" and "–") inside the compartment and on the batteries.**
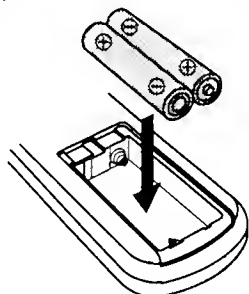
3. **Place the cover over the compartment, press down lightly, and push it upward until it snaps on.**
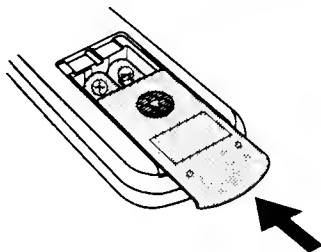
The batteries last about one year with normal use. If function of the remote control become erratic, replace the batteries. See "Precautions for the safe use of batteries" below for more information.

Precautions for the safe use of batteries

Observe the following precautions for the safe use of batteries. Their life will be shortened, they may burst or their contents may leak if they are used improperly:

• Remove batteries from the remote control if it is not going to be used for a long period of time.
• Remove dead batteries and dispose of them properly.
• Never leave dead batteries lying around, take them apart, mix them with other refuse, or throw them into an incinerator.
• Never touch liquid that has leaked out of a battery.
• Do not mix new and old batteries, or batteries of different types, when replacing them.

Using the remote control

The remote control is ready to use when its batteries are installed properly.

To use it, point its infrared light-emitting window toward the display window of the System and press a button. The operating range of the remote control is up to about seven meters in front of the System and within about 30 degrees to each side — with nothing between the remote control and the System interrupting the beam path.

If pressing a button on the remote control does not produce any response, check to make sure it is pointed correctly and try again. If it still does not function, check the batteries.
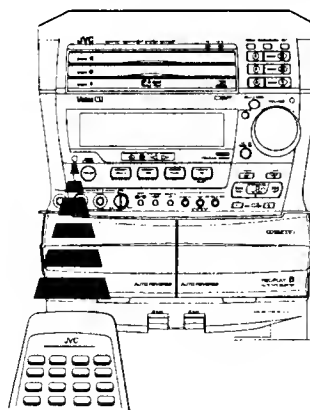
UNIQUE FEATURES

About the DEMO mode

The Compact Component system CA-V605T is equipped with a DEMO mode which is designed to introduce different features of the system to you. This DEMO mode will display these different features to you on the display screen. This feature will be turned on automatically when you plug in your system.
To turn the DEMO mode off push the DEMO button once while the System is off. The words "DEMO OFF" will appear in the display. (The System must be turned off to turn the demo feature off.)

About the ONE-TOUCH easy-on feature

This feature lets you start your system with ONE-TOUCH ease. When you approach the system the one touch easy-on buttons will start to blink and display the functions that are available to you. All you need to do is push any of the blinking buttons and the System will automatically turn on and start to play the chosen feature. When you push a blinking CD tray button that has no CD in it the tray will open.
To turn off the blinking buttons, and retain the easy-one feature, turn the System off and while holding down the STOP/CANCEL button, press the POWER button. The word "GUIDE OFF" will appear on the screen.

How to use ONE-TOUCH buttons

Changing the source
When you turn the power on, the indicator lights on the source buttons will turn to green and when you choose a certain source, that button will turn to red.
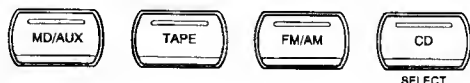
The disc buttons
• When the power cord is connected, only the disc tray buttons with CDs loaded in them will light. The light will change from green to red when they start to play.
• After you plug in the power cord after it has been disconnected, or power has been restored after a power outage, the ONE-TOUCH buttons will not illuminate.
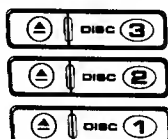
Digital Signal Processor (DSP)

The DSP built into this System is a processor which performs sophisticated digital signal processing to produce live sound space, based on sound field measurement data.
The sound field measurement data was obtained by measuring the sound fields of world famous concert halls using a "symmetrical 6-point sound analysis method", a unique three dimensional sound field measuring method created by JVC.

OVERVIEW OF CONTROLS

See pages in the parentheses for details.
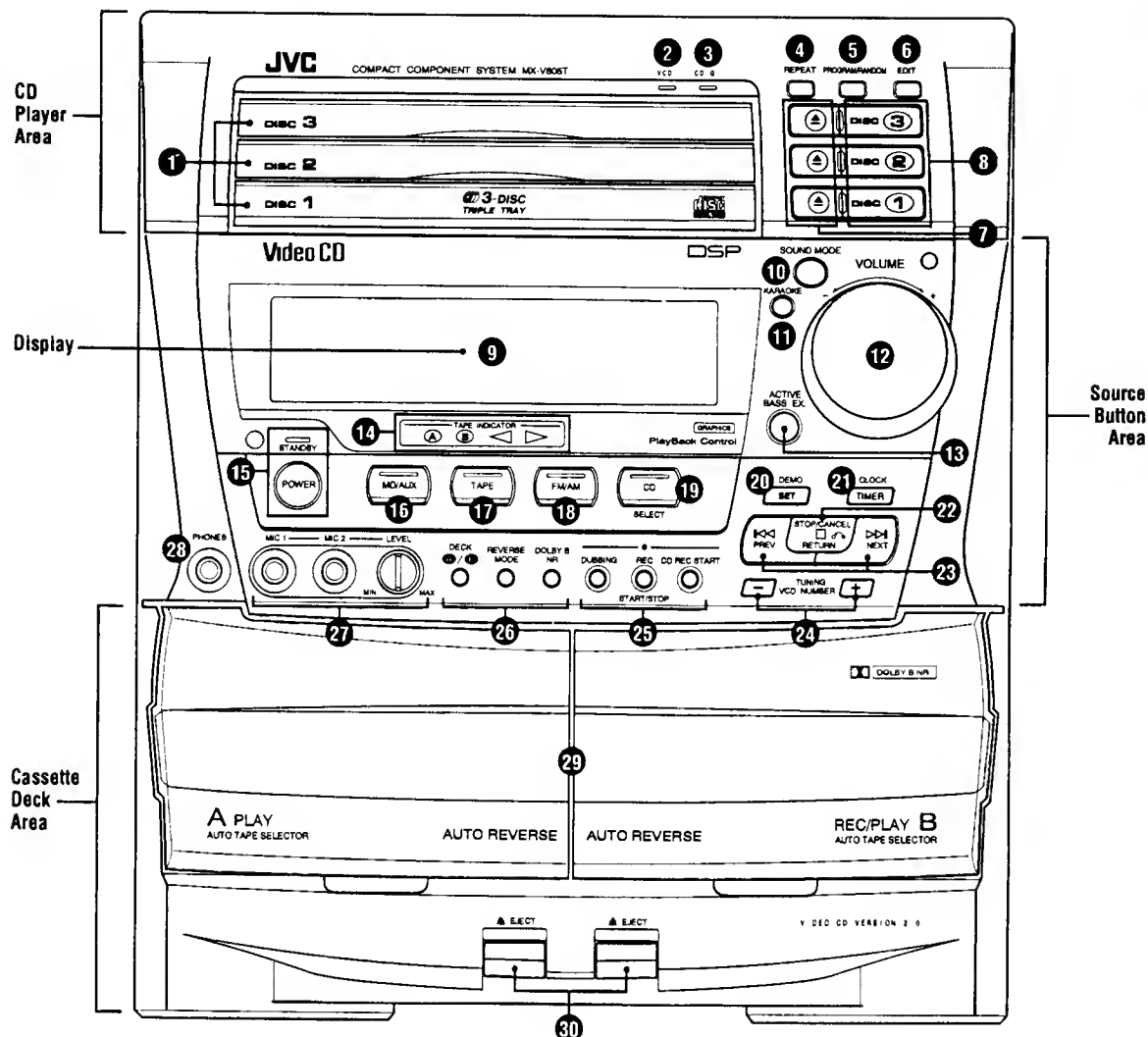
Front Panel

CD player area

Main Ref. Page

❶ Disc trays P.12
❷ VCD indicator P.12
❸ CD-G indicator P.18
❹ REPEAT button P.14
❺ PROGRAM/RANDOM button P.14, 15
❻ EDIT button P.26
❼ ▲ (open/close) buttons P.12
❽ Disc buttons P.12

Display

❾ Display (See page 8 for description)

Source button area

❿ SOUND MODE button P.11
⓫ KARAOKE button P.27

⓬ VOLUME knob P.10
⓭ ACTIVE BASS EX. (Extension) button P.11
⓮ TAPE INDICATOR P.21
⓯ STANDBY indicator/POWER button P.10
⓰ MD/AUX selector button P.10
⓱ TAPE selector button P.21
⓲ FM/AM selector button P.19
⓳ CD selector button/SELECT button P.12
⓴ DEMO mode/SET button P.6, 20
㉑ TIMER/CLOCK button P.31
㉒ ■/⟳ STOP/CANCEL/RETURN button P.13, 16
㉓ |◀◀/▶▶| PREV/NEXT buttons P.13, 16, 22
㉔ TUNING/VCD NUMBER buttons P.13, 19
㉕ Record control buttons P.23
㉖ Tape control buttons P.21
㉗ MIC jack/MIC LEVEL knob P.30
㉘ PHONE jack P.10

Cassette deck area

㉙ Tape deck A/B P.21
㉚ ▲ EJECT buttons P.21

Display

• Tuning display • Time display • Timer display • Record Timer and Recording Source indicator
• Sleep Timer and Source indicator • FM/AM band indicator • Preset channel indicator • All message display
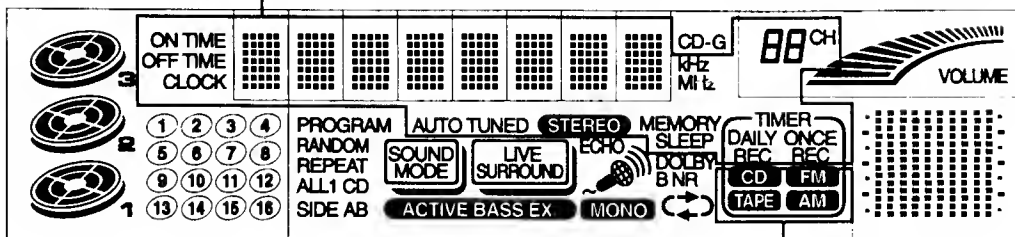
Daily Timer and Source indicator

Number of songs and
currently playing song indicator

• Currently playing song and time display
• Program play order

Disc
indicator
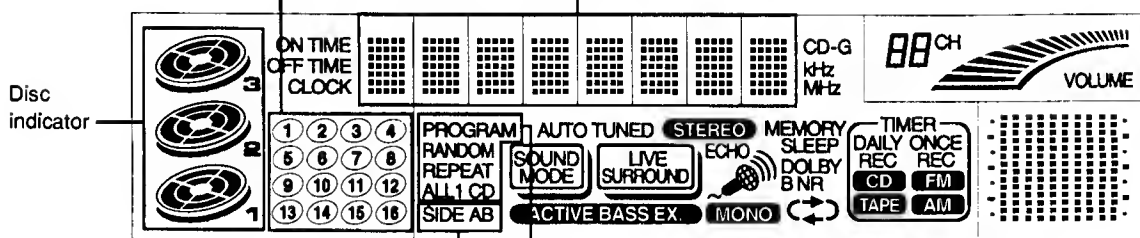
CD edit indicator

PROGRAM:	Program performance mode
RANDOM:	Random performance mode
REPEAT ALL:	Repeat all mode
REPEAT 1:	Repeat 1 mode

This displays the six different
musical intervals.

KEY #1~KEY #6
KEY b1~KEY b6

When KARAOKE is on,
this display will light.

This displays the 3 different
echo levels.

D.ECHO 1
D.ECHO 2
D.ECHO 3

When ECHO is on,
this display will light.

ECHO

• Lit when playing a CD with CD Graphics
• Radio channel display
• Volume level display

Music effect
display
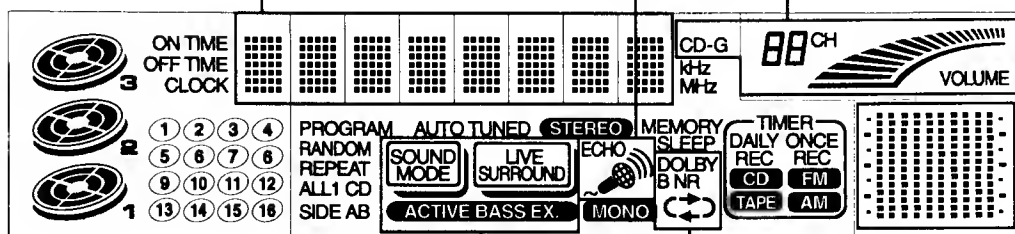
When ACTIVE BASS EX. is on,
this display will light.

• The DOLBY B NR display
• Reverse mode display

Remote Control Unit

Function and number buttons

❶ POWER button
❷ SLEEP button
❸ FM/AM button
❹ MD/AUX button
❺ SOUND MODE button
❻ 1, 2 buttons — ◄◄/►► MANUAL SEARCH **(S)**
❼ 3 button — II STILL **(S)**
❽ 4, 5 buttons — ◄/► VCD INDEX **(S)**
❾ 6 button — SLOW **(S)**
❿ 7 button — CD-G CHANNEL **(S)**
⓫ 8, 9, 10 button
⓬ +10 button (enables 11 thru 99 number selection)
⓭ PLAY MODE button
⓮ CANCEL button — AUTO/MONO **(S)**

CD buttons

⓯ ▲ Open/close buttons
⓰ Disc buttons
⓱ ■ RETURN/STOP button
⓲ ► SELECT/PLAY button
⓳ I◄◄/►►I PREV/NEXT buttons

Cassette deck buttons

⓴ A/B Deck select buttons
㉑ ◄/► PLAY buttons
㉒ ● REC/PAUSE button
㉓ ■ STOP button
㉔ ◄◄/►► Fast forward/Reverse buttons

System Control buttons

㉕ SHIFT button (enables buttons to have various different functions)
㉖ FADE MUTING button — DIGITAL ECHO **(S)**
㉗ VOLUME buttons — KEY CONTROL button **(S)**

(S): The buttons with the **(S)** mark after them have different functions when used in unison with the SHIFT button.
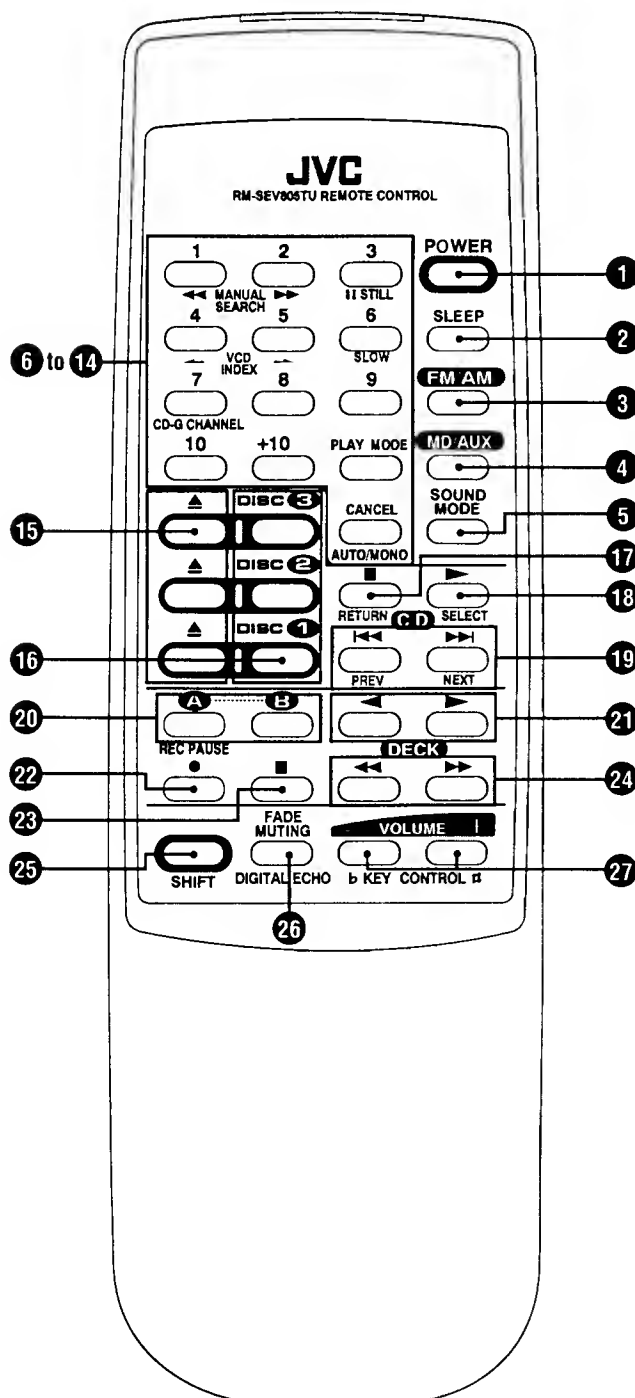
COMMON OPERATIONS

Amplifier/Tuner

Turning the power ON and selecting sources

When you press the play button for a particular source, the System automatically turns on and starts playing the source.

To select the auxiliary equipment as the source, press [MD/AUX] so that the System automatically turns on (when you press MD/AUX the System will turn on, but the AUX equipment will not start to play).

When using the remote control, press MD/AUX. Each time you press the button, the source alternates between MD and AUX.

To turn on the System without playing, press POWER button so that the STANDBY indicator turns off.

To turn off the System, press POWER button again so that the STANDBY indicator lights red.
Some energy (20 watts) is always consumed even while the System is in standby mode.
To switch off the power supply completely, unplug the AC power cord from the AC outlet.

Note
When you unplug the AC power cord or power failure occurs
The clock is reset to 0:00 right away, while the tuner preset stations will be erased in a few days.

Adjusting the volume

Turn the VOLUME knob clockwise to increase the volume or counterclockwise to decrease it.
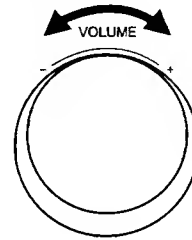
When using the remote control, press VOLUME + to increase the volume or press VOLUME – to decrease it.
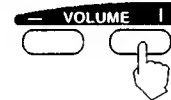
Using stereo headphones

Connecting stereo headphones
Connect stereo headphones to the PHONES jack at the middle-left of the front panel.
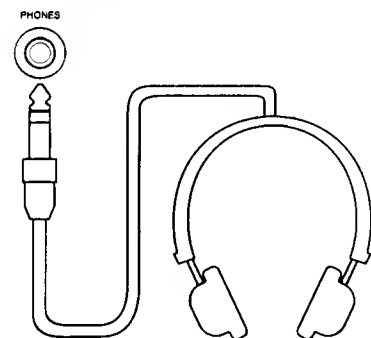
Note
For private listening
Connect a pair of headphones to the PHONES jack. No sound comes out of the speakers. Be sure to turn down the volume before connecting or putting headphones on.

> **Caution**
> DO NOT turn on the unit and/or start playing any source without setting VOLUME to MIN; otherwise, the sudden blast of sound can damage your hearing, speakers and/or headphones.

Reinforcing the bass sound

When using the ACTIVE BASS EX., the richness and fullness of the bass sound is maintained regardless of how low you set the volume.
You can use this effect only for playback.

To get the effect, press the ACTIVE BASS EX. (Active Bass Extension) button so that the ACTIVE BASS EX. indicator lights up in the display.

ACTIVE
BASS EX.

To cancel the effect, press the button again so that the indicator goes off.

Fade/Muting

When you press the FADE MUTING button (on the remote control) the volume will automatically fade out. If you press the button again it will return to its previous level.

FADE
MUTING

Selecting the sound modes

You can use only one mode at a time. Sound modes can be used for playback and for recording.

To select the sound modes, push the SOUND MODE button until the sound mode you want appears in the display.
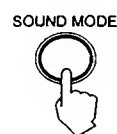
SOUND MODE

The SOUND MODE indicator lights up. (When selecting one of the Live Surround modes, the LIVE SURROUND indicator also lights up.)

Sound modes
* **D.CLUB**:	Increases resonance and bass.
* **HALL**:	Enhances the mid-frequency range which human voice is mostly made up of, like in a concert hall.
* **STADIUM**:	Adds clarity and spreads the sound, like in an outdoor stadium.
KARAOKE:	Puts your voice in instead of the vocals.
ROCK:	Gives a feeling of a live atmosphere. Good for rock music.
POP:	Enhances the vocals of the music.
CLASSIC:	Adds depth and brilliance to the sound.

* indicates a sound mode that incorporates live surround sound.

To cancel the effect, press the sound mode until the word "OFF" appears on the display.

When using the remote control
Press SOUND MODE button repeatedly until the sound mode you want appears in the display.
Each time you press the button, the modes change as follows:

```
┌──→ D.CLUB→ HALL→ STADIUM→ KARAOKE──┐
└────────── OFF← CLASSIC← POP← ROCK←──┘
```
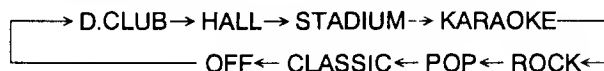
BASIC OPERATIONS

Now you can play a variety of CDs!!

Triple disc tray usage

Up to three (3) discs can be loaded in the System. You may insert a disc into any of the disc trays 1 through 3 whichever you prefer.
If you want to play only a specified disc, press the corresponding disc 1, 2 or, 3 button located to the right of the ▲ (OPEN/CLOSE) button.

When three discs are inserted, basic order of playing is as following.
* Pressing DISC 1: DISC 1 → DISC 2 → DISC 3 → STOP
* Pressing DISC 2: DISC 2 → DISC 3 → DISC 1 → STOP
* Pressing DISC 3: DISC 3 → DISC 1 → DISC 2 → STOP
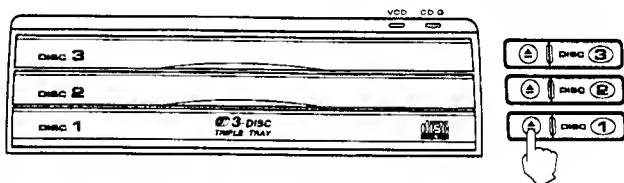
Preparation for playing

The CA-V605T is equipped with an ONE TOUCH easy-on feature that lets you turn the System on with one easy touch. Just press the button of the source you want to play and it will start to play.
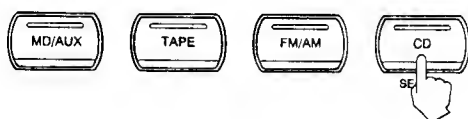
Inserting/removing the disc(s)

Press the ▲ (OPEN/CLOSE) button (1 through 3) to open the disc tray. Then place the disc in the round recess of the tray with the label side up. To close the tray, press the ▲ (OPEN/CLOSE) button again.

If you press the ▲ (OPEN/CLOSE) button of the playing disc, the player stops and then opens the tray.
If you press the ▲ (OPEN/CLOSE) button of a disc that is not being played, you can change discs without stopping play.
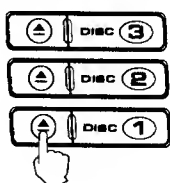
Note
* When loading a disc in the disc tray, be sure to position the disc inside the recess. Otherwise, the disc will be damaged when the disc tray is closed, and the disc cannot be removed from the System.

CORRECT   INCORRECT

Starting to play disc(s)

Press the ⌷ SELECT (PLAY) button. The player starts to play from the disc indicated in the display window. Press one of the DISC 1 through 3 buttons and the player plays the disc you pressed, from the 1st track. For individual track selection, use the number keys (1 to 10 and +10 button) on the remote control.
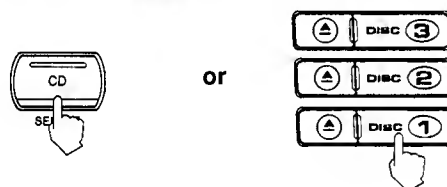
When you start play, the display window shows disc number and the track number being played.
If the disc is a Video CD, the VCD indicator on the front panel will light up.

Using number keys

Press the number keys to select numbers.

On the remote control ..... 1 to 10 and +10 key
Example: For number 5, press 5. For number 15, press +10, then 5. For number 20, press +10, then 10. For track 32, press +10 three times, then 2.
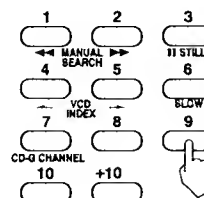
Using VCD INDEX

An index is a pre-recorded mark to locate a particular point in a disc. If a disc has indexes recorded, it is mentioned on the printed surface of the disc or on the disc's package.
This function is handled by the remote control. Hold down the SHIFT button and select the index number by pressing the VCD INDEX button.
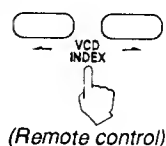
(Remote control)

Stopping play

To stop a disc, push the ■ STOP/CANCEL button once.

Pausing play

Press the CD button to temporarily suspend play.

To restart play press the CD button once again. On the remote control, while pressing the SHIFT key press the II STILL button.
To restart play, press the ► SELECT play button on the remote control.

Auto search

On the System, during play, pressing the I◄◄ PREV button once causes the player to replay the current track from the beginning. Pressing the I◄◄ PREV button twice causes the player to play the previous track. Pressing the ►►I NEXT button once causes the player to skip to the next track.
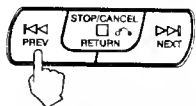
On the remote control, pressing the I◄◄/►►I PREV/NEXT buttons cause the disc to skip to the next or previous track.
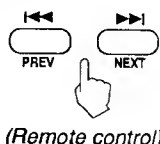
(Remote control)

Manual search

This function is handled by the remote control. To reverse/fast forward, hold down the SHIFT button and press either ◄◄ or ►► of the MANUAL SEARCH (No. 1, 2) buttons.
Continuing to hold down the buttons causes it to search much faster.

To use slow motion playback

During playback of a video the CD, hold down the SHIFT button, and then press the SLOW button.
Each time you press the button, the slow motion speed decreases 1 level until the slowest speed is reached. During slow motion playback, no sound comes out.
To resume normal playback, press ► on the remote control.

To use frame-by-frame playback

During playback of a video CD, hold down the SHIFT button and then press the STILL II button.
Play pauses and you see a still picture on the TV screen. Then each time you press the button, still pictures advance by one frame. During frame-by-frame playback, no sound comes out.
To resume normal playback, press ► on the remote control.

Notes
- If you do not advance the still picture for about 5 minutes, the CD player automatically stops, the still picture disappears and the blue screen appears on the TV screen.
- If you cannot restore normal playback after using the slow motion or frame-by-frame playback.
  - Press the I◄◄ PREV button and then restart play.
  - Press the ■ RETURN button to go back to the menu and then restart play.

RESUME

When the ■ STOP/CANCEL button (or the ■ button on the Remote Control) is pressed during playback, and the source is changed, the track number is memorized even when the power is turned off. The next time the CD button (or the ► button on the Remote Control) is pressed, play resumes from the track where it was interrupted.
❏ To start playback from the first track, press the DISC button.

VARIOUS UNIQUE FUNCTIONS

Programming track sequence

Preparation
It is not possible to enter programming mode during play. Verify whether the Player is playing. If playing, stop the player.

Operation
1. Press the PLAY MODE button until PROGRAM is displayed.

PLAY MODE

(Remote control)

2. Specify the disc by the DISC (1 through 3) button and then the track by the number keys successively. You can program up to thirty two (32) tracks by repeating this procedure.
3. To play the programmed track press the ► SELECT button on the remote control.

(Remote control)

ON TIME
OFF TIME
CLOCK

Disc Number: 3
Track Number: 15
Program Number: 25
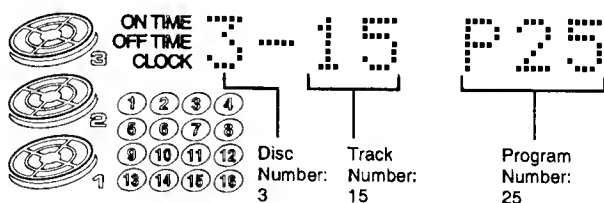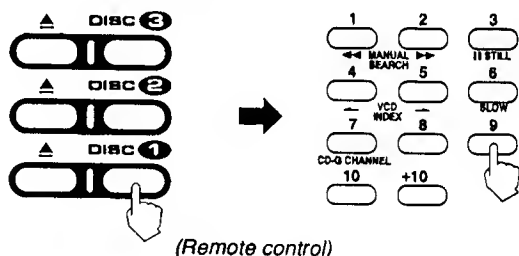
Programming track sequence (front panel)

Operation
1. Press the PROGRAM/RANDOM button until PROGRAM appears in the display window.
2. Press the disc button to designate the disc you want to program.
3. Press the |◄◄/►►| PREV/NEXT button to designate the track number you want to program.
4. Press the SET button to enter your selection into programming.
5. Continue with this procedure until all desired programming is completed, and press the ⬚ CD SELECT button.

Canceling a programmed track

Operation
The Player must be stopped to cancel a track. Once you have stopped the Player. Press the STOP/CANCEL button and the last programmed track is canceled. The next track to be played and the number of programmed tracks left are displayed on the display screen.

Repeating tracks

It is possible to repeat all discs, repeat (1) CD or repeat 1 song.

Preparation
This function is controlled by the REPEAT button on the front panel of the Player.

Operation
By pressing the REPEAT button, REPEAT modes are cycled as shown below.

REPEAT

┌─→ REPEAT ALL → REPEAT 1 CD → REPEAT 1 ─┐
│   (All discs)   (1 CD)   (1 track) │
└──┘

(Display window)
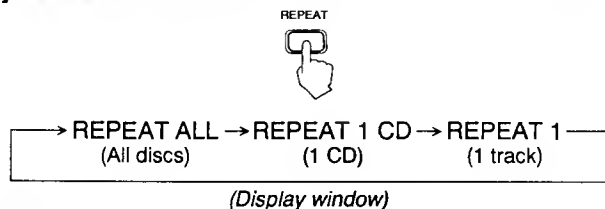
Notes
- When playing a programmed sequence of tracks, REPEAT ALL, and REPEAT 1 are available.
- When playing a disc with the Playback Control function, the repreat function is not available.

Randomly playing tracks

Preparations
• This function is controlled on the front panel and on the remote control.
• This function plays tracks randomly from all trays in which CDs are loaded.

Operation
1. **Stop the player.**
2. **Press the PLAY MODE or PROGRAM/RANDOM button until "RANDOM" appears in the display window.**

PROGRAM/RANDOM

3. **Press ► PLAY button.**
4. **To cancel random playing, after stopping the player [■ STOP/CANCEL button], press the PLAY MODE button on the remote control or PROGRAM/RANDOM button on the front panel.**

PLAY MODE

(Remote control)

or

PROGRAM/RANDOM

(Front panel)
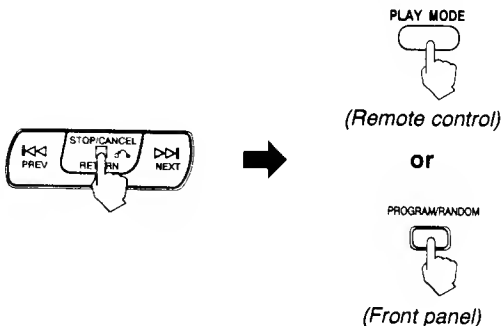
Notes
• Random is not available in program mode.
• In RANDOM mode, only REPEAT ALL and REPEAT 1 functions are available.

Tray Lock Function

In order to safely keep the discs in the CD Player, the three trays can be electronically locked in a single operation.
When the electronic lock is on, the trays cannot be opened even if the ▲ button is pressed.
This function can only be accessed by using the buttons on the Unit itself.

Locking the Electronic Lock

1. **Put the CA-V605T's power into STANDBY mode.**

   If the power is on, press the POWER button to light the Standby indicator.

2. **While pressing the ■ STOP/CANCEL button, press the ▲ button for DISC 1's tray on the Unit.**
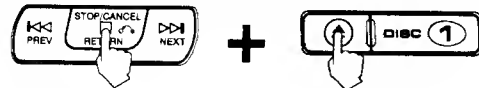
   "LOCKED" appears on the display to let you know that the trays have been locked.
   When the CD Player trays are locked, pressing the ▲ buttons displays the message "LOCKED" on the display and the trays do not open.

Unlocking the Electronic Lock

1. **Put the CA-V605T's power into STANDBY mode.**

   If the power is on, press the POWER button to light the Standby indicator.

2. **While pressing the ■ STOP/CANCEL button, press the ▲ button for DISC 1's tray on the Unit.**

   When the unlock operation is done, "UNLOCKED" appears in the display to show that the lock has been taken off.
   The trays can now be opened by pressing the ▲ buttons.
   The ▲ button can also be used to automatically turn on the power.

OPERATION OF PLAYBACK CONTROL FUNCTION

Playing Video CDs with Playback Control function

This System provides a Playback Control function which utilizes a procedure (menu selection) programmed in a video CD. The playback operation procedure may differ depending on the disc you use.

The Playback Control function is described below and in the figure.
- High-resolution still image display - Super-fine reproduction of still images with more than 4 times the resolution of video tape.
- Menu-driven playback - interactive menus for easy selection of tracks

Preparations
- A video CD with the Playback Control function is required for this operation.
- The buttons available for use are on the remote control, are the I◄◄/►►I PREV/NEXT buttons, 🖵 CD SELECT button, DISC (1 through 3) buttons, ♪ RETURN button and the number keys.

Button functions
I◄◄/►►I PREV/NEXT buttons .. Move through menu.

🖵 CD SELECT button .... Starts up a video CD with the PBC function in DISC tray 1 to 3.

DISC (1 through 3) buttons .... Start up a video CD with the PBC function in the specified DISC tray.

♪ RETURN button .... Returns to the menu.

Number keys and +10 button ... Select a specific menu item from the television screen or monitor.

◄◄/►► MANUAL SEARCH ..... To use manual search while playing a video CD, hold down the SHIFT button, and press the ◄◄/►► MANUAL SEARCH button on the remote control.

Note
Sometimes due to improper manufacturing video CDs will function differently.

Operation
1. **Press the DISC (1 through 3) or CD SELECT button, and then the Player starts up the PBC function. "PBC" is shown in the Display window.**
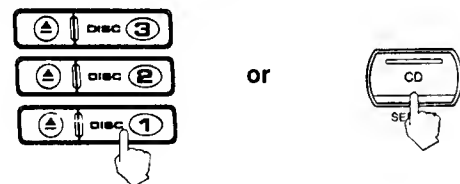
   VIDEO CD → PBC

2. **To move through the menus, press the I◄◄/►►I PREV/ NEXT buttons.**

   (Front panel)   *(Remote control)*
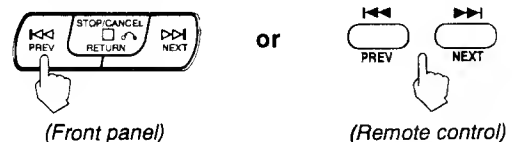
3. **When the menu you want appears, select an item in the menu by using the number keys. The numbers on the number keys correspond to the menu item numbers.**

   On the front panel
   Press the VCD NUMBER button ⊡/⊞ and then 🖵 CD SELECT button.
   On the remote control
   Press the number key and your selection will start to play.

4. **To return to a menu and stop the track being played, press the ♪ RETURN button.**

   (Front panel)   *(Remote control)*
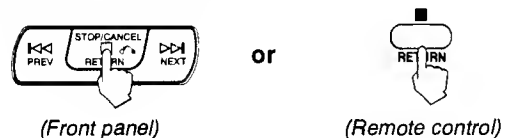
Notes
- Page numbers in the menu show that preceding pages exist. To move from the current menu, press the I◄◄/►►I PREV/NEXT buttons.
- When you press number keys, the track will start playing without pressing the ► SELECT button.
- When there is only one menu, pressing the NEXT button will cause the System to start playing.

Video CD with Playback Control function

What is the Playback Control function?

The Playback Control function, ushering in a new video CD age, allows you to enjoy menu-driven operation and high-resolution still images having a resolution four times greater than video pictures.

- **Menu-driven playback**
  You can interact with the screen using a menu display to select and play an entry.
- **High-resolution still Image display**
  You can display high-quality images four times clearer than video pictures.

Example of playback by the Playback Control function

A selection menu is displayed when you start playing a video CD disc with the Playback Control function. The selection menu shows a list of numbers for selection. Some discs may show moving pictures or a divided screen.

1. When a list of numbers is displayed, selecting a number shows its contents.

2. When a moving picture is displayed, pressing SELECT at the time when a part of the movie you desire is shown plays the movie.

3. When the selection menu is redisplayed after you have played your selection, selecting a number again can replay its contents. (Some discs may show the menu screen several times.)

When "Next" and "Prev" are shown, pressing "NEXT" or "PREV" can change the selection menu.

4. After playback, press RETURN to go back to the previous screen.
   After playback, pressing RETURN for 2 seconds or more causes it to go back to the previous menu selection. Some discs may return you to the menu screen shown before playback.

Notes
- When a menu is displayed for a long time, about 10 minutes, the screen background automatically fades out to prevent screen burn-in while the setting is suspended.
- When using the REPEAT function the PBC function is not available.

GRAPHIC/DIGITAL AUDIO CDs

Playing CD Graphics/ digital audio CDs

Playing CD Graphics

Basic video CD-playing procedures apply although the pictures are still. A graphic picture CD is identified by "GRAPHICS" shown on the display and the CD-G indicator will lit on the front panel.

To select the CD graphic channel
If the CD-G has patterns (up to 15) of graphics (they are called "graphic channels"), you can select the one you want. You can find out whether or not the CD-G has graphic channels by looking at its package or the printed surface of the disc.

To change the graphic channel, press CD-G CHANNEL repeatedly until the graphic channel you want appears on the TV screen.

Notes
* The following operations may distort the image on the screen.

    Searching for starting point of music
    Fast forwarding/reversing
    Stop/pause
* If paused, the screen changes to blue in a few minutes. This is to prevent burn-in of the TV screen.
* When you use as Karaoke, see page 28.

Playing digital audio CDs

Basic video CD-playing procedures apply to the reproduction of sound.

To record a CD onto a cassette tape, see page 23.

AM-FM TUNER

Before listening to FM and AM broadcasts, check the following:
* Both the FM and AM antennas are firmly connected.
* Check the AM tuner interval spacing (9 kHz or 10 kHz) for your area.

Setting the AM tuner interval spacing

Some countries space AM stations 9 kHz apart, and some countries use 10 kHz spacing.
When shipped, the built-in AM tuner is set to 9 kHz spacing.

To set the AM tuner to the 10 kHz spacing, be sure that the unit is turned off, but is plugged into a wall outlet. Hold down ►►I NEXT and then press POWER.
To set it back to the 9 kHz spacing, be sure that the unit is turned off, but is plugged into a wall outlet.
Hold down I◄◄ PREV and then press POWER.

Tuning in a station

Operation
1. **Press [FM/AM] FM/AM.**
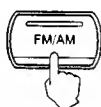
The unit automatically turns on and tunes in the most recent station (either FM or AM).
Each time you press the button, the band alternates between FM and AM.
2. **Press and hold TUNING – or +.**
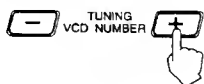
The unit starts searching stations and stops when a station of sufficient signal strength is tuned in.
The TUNED indicator lights up in the display. If a FM program is broadcast in stereo, the STEREO indicator also lights up.
To stop during searching, press TUNING – or +.

When using the remote control unit
Pressing FM/AM button, FM or AM automatically turns on the remote control and starts tuning in the most recent FM or AM station respectively.

Note
When you press TUNING – or + briefly and repeatedly, the frequency changes step by step.

To change the FM reception mode
When an FM stereo broadcast is hard to receive or noisy, press AUTO/MONO on the remote control, so that the AUTO indicator goes off in the display. Reception improves, but there are no stereo effects. In this monaural mode, static is produced (since muting is also canceled).

To restore the stereo effect, press AUTO/MONO so that the AUTO indicator lights up. In this stereo mode, static is not produced, and you can hear stereo sounds when a program is broadcast in stereo.

Presetting stations

You can preset 10 stations each for FM and AM.

Operation
1. **Press (FM/AM) FM/AM button and then TUNING – or + to tune in the station you want to preset.**
   See "Tuning in a Station" on the previous page.
2. **Press SET.**
   The MEMORY indicator blinks for about 5 seconds.
3. **Press |◄◄/►►| PREV/NEXT to select a channel number while the MEMORY indicator is blinking in the display.**
4. **Press SET again .**
   The MEMORY indicator goes off in the display.

To erase the preset stations
Storing a new station on a used number erases the previously stored one.

Note
When you unplug the AC power cord or power failure occurs, the preset stations will be erased in a few days. If this happens, preset the stations again.

Tuning in a preset station

Operation
1. **Press (FM/AM) FM/AM.**
   The unit automatically turns on and tunes in the most recent station (either FM or AM).
   Each time you press the button, the band alternates between FM and AM.
2. **Press and hold |◄◄/►►| PREV/NEXT until the channel number you want appears in the display.**

When using the remote control
You can select a preset station directly by specifying its channel number.

Operation
1. **Press (FM/AM) FM/AM.**
   The System automatically turns on, and then by pressing the FM/AM button, the System will switch from the most recently selected FM or AM station.
2. **Press the number button (1 — 10) to select your preset channels.**

Note
If you want to use the number buttons on the remote control to select the preset radio stations, you must select FM or AM from the remote control's FM/AM button.

CASSETTE DECK

Listening to tapes

You can play back type I, type II, and type IV tapes without changing any settings.

Type I .... Normal
Type II .... High Position
Type IV .... Metal (For listening only, not recordable)

However, before you start play, you need to check the type of the Dolby NR* system used for the tape you play. Only the Dolby B NR is incorporated into this unit.

Listening to tapes in deck A or B

By pressing the [TAPE] TAPE button, you can turn on the unit, and start playing a tape if a tape is in the deck.

Operation
1. **Press EJECT for the deck you want to use.**
2. **Put the cassette in, with the exposed part of the tape down.**
3. **Close the cassette holder gently.**
4. **Press [TAPE] TAPE and the Player will start the side the tape indicator shows.**

To play the opposite side of the tape, press the [TAPE] TAPE button again. When the tape plays to the end, the deck automatically stops if the Reverse Mode is not on. (See "To play both sides repeatedly — Reverse Mode.")

On the Player to stop during play, press ■ STOP/CANCEL.
To reverse or forward, press ◄◄/►►I PREV/NEXT and the TAPE button to start the tape playing again.
To remove the cassette, press EJECT.

Note
When cassette tapes are loaded into both deck A and B, you can choose the deck to play by pressing the DECK **Ⓐ/Ⓑ** button on the front panel, or the **Ⓐ** or **Ⓑ** buttons on the remote control. Tape indicator shows you which deck will be activated.

To play a tape recorded with the Dolby NR system
Press DOLBY B NR to activate the Dolby B NR system.
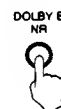
The DOLBY B NR indicator lights up. The system works for both decks at the same time.
To cancel the Dolby NR system, press the button again so that the indicator turns off.

To play both sides repeatedly — Reverse Mode
Press REVERSE MODE button so that the REVERSE MODE indicator in the display window (⊃) is lit. Reverse Mode works for both decks at the same time.
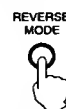
The tape automatically reverses at the end of a side and start playing the other side, and repeats the same process.
To cancel Reverse Mode, press the REVERSE MODE button again so that the indicator turns to ⊃.

Locating the beginning of a song — Music Scan

You can use Music Scan to locate the beginning of a song. Music Scan searches for blank portions that usually separate recorded songs, then plays the next song.

To find the beginning of the current song

During play, press ⏮/⏭ PREV/NEXT in **the opposite direction** to the tape play.
Searching stops automatically at the beginning of the current song, and the current song starts again automatically.

To find the beginning of the next song

During play, press ⏮/⏭ PREV/NEXT in **the same direction** as the tape play.
Searching stops automatically at the beginning of the next song, and the next song starts automatically.

On the remote control, to locate the beginning of the current or next song, press ⏮/⏭ buttons.

Notes
- You may stop music scan and start play again by pressing the TAPE button.
- **Music Scan works by detecting a 4-second long blank between each song, so it won't work well in the following cases.**
  - No blank at the beginning of a song.
  - Noise (often caused by much use or poor quality dubbing) which fills the blank with noise.
  - Long, very soft passages or pauses in a song.

Fast forward/Reversing tapes

To fast forward/reverse tapes, first press the ■ STOP/CANCEL button and the one of the ⏮/⏭ PREV/NEXT buttons.

(Front panel)

On the remote control, press the ■ STOP and then one of the ◄◄/►► buttons.
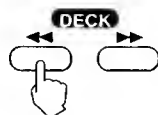
(Remote control)

Continuous play Playing tapes in deck A and B

You can play tapes in deck A and B continuously.

Operation
1. **Press EJECT for both decks.**
2. **Put cassettes into both decks, with the exposed part of the tape down.**
3. **Close the cassette holders gently.**
4. **Press 〔TAPE〕 TAPE and the Player will start the side the tape indicator shows.**
   The direction indicator starts blinking and tape play starts. When a tape finishes playing, the unit checks to see if a tape is in the other deck. If one is there, it automatically starts playing it.

To stop play, press the ■ STOP/CANCEL button.

Notes
— How Continuous Play actually works —
When Reverse Mode is on:
- After the reverse side of the tape finishes playing, the tape in the other deck starts playing. The tapes continue to play in the sequence below.

Deck A Front side	←	Deck B Reverse side
↓		↑
Deck A Reverse side	→	Deck B Front side
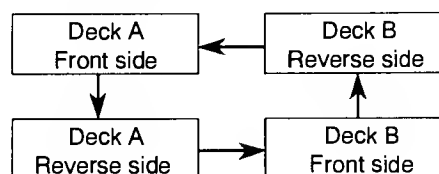
When Reverse Mode is off:
- After one side of the tape finishes playing, the tape stops.

RECORDING

You can record using deck B, connected VCR and connected digital recording equipment.

Recording tapes

You can use type I and II tapes for recording.
You can only record on deck B.

Operation
1. **Press EJECT for the deck B.**
2. **Put in the cassette to record onto, with the exposed part of the tape down.**
3. **Close the cassette holder gently.**
4. **Press REC START/STOP so that the REC indicator lights up.**

5. **Start playing the source — FM, AM, CD player, deck A, or auxiliary equipment connected to VCR and AUX jacks by pressing the desired button.**
   When the source is deck A, you can also use the dubbing method. (See "Dubbing Tapes.")

To stop recording, press REC START/STOP button.
To stop recording temporarily, press REC PAUSE on the remote control.
To resume recording, press REC START/STOP button or ◀/ ▶ button on the remote control.
To record a tape with the Dolby NR system (except when the source is deck A)
Press DOLBY B NR to activate the Dolby B NR system.
The DOLBY B NR indicator lights up.
To cancel the Dolby NR system, press the button again so that the indicator turns off.
To record on both sides — Reverse Mode
Press REVERSE MODE so that the REVERSE MODE indicator (⊃⊂) lights up.
When the source is deck A, see "Dubbing Tapes."
To cancel Reverse Mode, press the REVERSE MODE button again so that the indicator ⊃⊂ turns off.
To record a tape with the sound modes (except when the source is deck A)
Before you start recording, select the sound mode you want by pressing the SOUND MODE button. You can record in any one of the modes.

> **CAUTION**
> The use of the 120 minutes long or thinner tape is not recommended, since characteristic deterioration may occur and this tape easily jams in the pinch-rollers and the capstans.

Dubbing tapes

You cannot dub tapes with the sound modes.
It is preferable that the tape type (type I or II) you record from be the same as the tape type you record onto when dubbing tapes.

Operation
1. **Put the source cassette in deck A, and the cassette to be recorded onto in deck B.**
2. **Press DUBBING button on the front panel.**

Dubbing starts. (The System will automatically find the begining of both tape and start to record).

To stop during dubbing, press REC START/STOP button.

To dub both sides — Reverse Mode
Press REVERSE MODE so that the Reverse Mode indicator (⊃⊂) is lit, and start from the front sides for both deck A and B.
To cancel Reverse Mode, press the REVERSE MODE button again so that the indicator turns to ⊃⊂.

Note
The Dolby NR system is inactive during dubbing
The dubbed tape automatically contains the same processing as the source tape. The DOLBY B NR indicator automatically turns off.

To protect your recording
Cassettes have two small tabs on the back to protect unexpected erasure or re-recording.
To protect your recording, remove these tabs.
To re-record on a protected tape, cover the holes with adhesive tape.
When using type II tape, be careful not to cover the holes used to detect the tape type.

Page 23
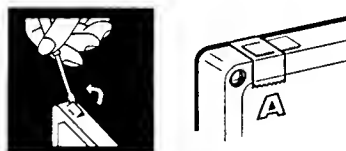
Recording on the connected equipment

You can record sounds on the VCR connected to the MD DCC OUT (REC) jacks on the rear panel.
Before you start recording, refer also to the manuals supplied for the connected equipment.

Operation
Start playing the source and recording.
For recording on VCR:
You can select the sources; FM, AM, deck A and B, CD player, and the equipment connected to the AUX jacks.
When you start recording from the equipment connected to the AUX jacks, select (MD/AUX).
Refer to page 3 and the manual for the connected equipment.
For recording on the digital equipment; — MD, DCC, DAT
You can play only the conventional audio CD and the CD-G as the source.

Notes
*   You cannot adjust the recording level manually
    Recording level is fixed.
*   You can not record on the connected digital equipment from video CDs.

```
┌── CAUTION ────────────────────────────────┐
│ •  It may be unlawful to record or playback copyrighted │
│    material without the consent of the copyrighted │
│    owner.                                          │
│ •  If recording you make have excessive noise or static, the │
│    unit may be too close to a TV. Increase the distance │
│    between the TV and the unit.                   │
└────────────────────────────────────────────┘
```

CD edit recording

You have 2 ways, except the standard method described on page 23, to record from disc (conventional audio CD, CD-G, and video CD without the PBC function) to tape.
CD Direct Recording — Everything on the disc onto the tape in the order it is on the disc.
Auto Edit Recording — The unit arrange which tracks to be recorded on which side of the tape, so a track isn't cut off at the end of the tape.

CD Direct Recording

This is the easiest way of recording a disc.

Operation
1. **Put the cassette to record onto In deck B.**
2. **Place a disc correctly on the circle of the disc tray, with its label side up.**
3. **Press CD REC START.**

CD REC START

(Front panel)

"CD REC" appears in the display.
Deck B starts recording and the CD player starts playing.

To stop during CD Direct Recording, press ■ STOP/ CANCEL button.
When you press ■ STOP/CANCEL button, you can make a 4-second blank at the end of recording.

Note
— How CD Direct Recording Actually works —
Deck B records tracks in the order on the disc. If the tape ends while recording a track, deck B rewinds the tape to the beginning of the track and re-records it so that it fades out naturally at the end of the tape.
If recording is continued to the reverse side, a 10 second blank is created at the beginning of the reverse side. Then the reverse side starts from last track recorded on the front side and will fade out at the end of the tape again.

To record a tape with the Dolby NR system
Press DOLBY B NR to activate the Dolby B NR system.
The DOLBY B NR indicator is shown on the display.
To cancel the Dolby NR system, press the button again so that the indicator turns off.
To record on both sides — Reverse Mode
Press REVERSE MODE so that the REVERSE MODE indicator is lit on the display.
To cancel Reverse Mode, press the button again so that the indicator turns off.
To record a tape with the sound modes
Before you start recording, select the sound mode you want. You can record with any one of the preset the sound modes.

Notes
• **You can record a set of programmed tracks using CD Direct Recording.**
Before you press CD REC START, make a program as you want.
To make a program, see page 14.
• **You can use Repeat Play during CD Direct Recording.**
To repeat a disc or a track, see page 14.

Auto Edit Recording

The unit automatically arranges the tracks on a disc to fit the tape. The selection of which tracks go on which side of the tape is based on the lengths of the tracks and the length of the tape.
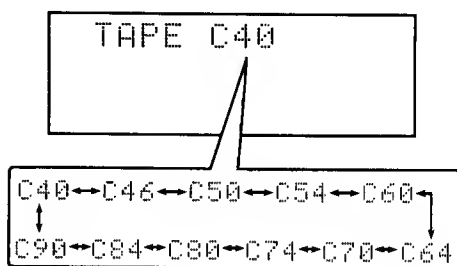
Operation

1. **Put the cassette to be recorded onto In deck B.**
2. **Place a disc correctly In the circle of the disc tray, with Its label side up.**
3. **Press REVERSE MODE so that the REVERSE MODE indicator (⊂⊃) lights up.**
   If you want to record on only one side of a tape, turn off the REVERSE MODE indicator.
4. **Press EDIT. "DISC ?" appears In the display, and then the tape length best to use appears.**

EDIT

(Front panel)

5. **Press the disc button of the disc you want to record from.**

   If the tape you want to record on Is a different length, press ◄◄/►►┤ PREV/NEXT. The tape length shown in the display cycles as follows so you can select a different tape length.

   ```
   ┌──────────────────────┐
   │                      │
   │   TAPE C40           │
   │                      │
   └──────────────────────┘

   C40←C46←C50←C54←C60┐
    ↑                 │
   C90←C84←C80←C74←C70←C64
   ```

6. **Press SET when the length tape you want to use appears in the display.**
   The display shows which tracks go on the front side (A) and which on the reverse side (B).

DEMO
SET

(Front panel)

Each time you press the button, the display alternates to show the tracks for the front side (A) and those for the reverse side (B).

7. **Press CD REC START.**
   "TAPE SIDE-A STAND-BY" appears in the display.

CD REC START

   Deck B rewinds the tape and starts recording. The CD player starts playing about 10 seconds later.
8. **When recording is complete, the player will stop.**

To cancel the Auto Edit setting, press the PROGRAM/RANDOM button.
To stop during Auto Edit Recording, press ■ STOP/CANCEL on the front panel.
When you press ■ STOP/CANCEL, you make a 4-second blank at the end of recording.
To record a tape with the Dolby NR system
Press DOLBY B NR to activate the Dolby B NR system.
The DOLBY B NR indicator lights up.
To cancel the Dolby NR system, press the button again so that the indicator turns off.
To record a tape with the sound modes
Before you start recording, select the sound mode you want. You can record with any one of the sound modes.

Notes

- **You can program up to 16 tracks for each side of the tape**
  However, you cannot program a track the number of which on the disc is greater than 31.
- **If you use a tape shorter than the total playing time of selected tracks**
  The last recorded tracks will be fading out at the ends of both sides.

— How Auto Edit Recording actually works —

The unit selects which tracks go on which side of the tape so that the total playing time of the selected tracks is within the tape length and that no track is cut off while recording.
Before recording starts, the deck B automatically rewinds the tape to the beginning of the front side and creates a 10 second blank.
If recording is continued to the reverse side, a 10 second blank is also created at the beginning of the reverse side.

KARAOKE

Singing along — Karaoke

You can enjoy singing along using conventional audio CDs (or tapes), CD-Gs and video CDs.

Singing along with conventional audio CDs or tapes — Vocal Masking

When playing a stereo recorded source such as conventional audio CDs or tapes, you can reduce the lead vocal and replace it with your voice by singing into the microphone. Usually stereo recorded CDs are the best source for Vocal Masking.

What Vocal Masking actually does
Vocal Masking reduces the lead vocal (but never erases it).
The following sources are not good for Vocal Masking.
• Monaural sources
• Multiplex karaoke tapes and discs
• Poorly dubbed tapes
• Stereo recorded source, but with only few instruments, with duets, or with strong echo

Operation
1. **Turn down MIC LEVEL fully.**
2. **Connect the microphone (not supplied) into the MIC jack on the front panel.**
3. **Play the source — a CD, a tape, or other.**
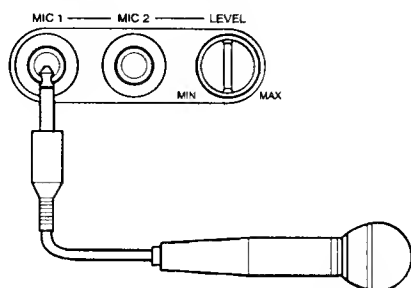
4. **Press the KARAOKE button until "V. MASK" appears on the display.**

5. **Turn MIC LEVEL and VOLUME to adjust the microphone level and the sound output level.**
6. **Sing into the microphone.**

Note
You can adjust both MIC 1 and MIC 2 with the MIC LEVEL knob.

To apply echo to your voice
While holding down the SHIFT button, press DIGITAL ECHO on the remote control.
Each time you press the button, the amount of echo applied changes and the display shows as follows:

$$\rightarrow \text{ECHO 1} \rightarrow \text{ECHO 2} \rightarrow \text{ECHO 3} \rightarrow \text{OFF}$$
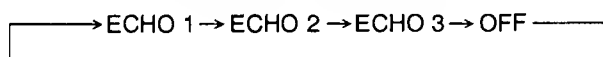
ECHO 1: A little echo is applied.
ECHO 2: More amount of echo than ECHO 1.
ECHO 3: Strong echo is applied.
OFF: No echo is applied.

To record yourself singing along
See "Microphone Mixing" on page 30.

Notes
• **For preventing howling and squealing when using the microphone**
  Adjust MIC LEVEL and VOLUME, and try not to point the microphone at the speakers.
• **When you are not going to use the microphone**
  Keep MIC LEVEL set to MIN, and disconnect the microphone.

Singing along with Multiplex Karaoke Video CDs without the PBC function or Multiplex Karaoke CD-Gs

If the disc you are going to play is a multiplex karaoke disc, the instrumental parts are recorded on the left channel and the vocal parts are recorded on the right channel. So, you can select the output sounds — whether the instrumental parts only or both of the instrumental parts and vocal parts.
Before playing a disc, turn on the TV and select the video input so that you can view the pictures from the CD player.

Operation
1. **Turn down MIC LEVEL fully.**
2. **Connect the microphone (not supplied) into the MIC jack on the front panel.**
3. **Press ⏏ on any of the disc trays.**
   The unit automatically turns on and the disc tray comes out.
4. **Place a disc correctly in the circle of the disc tray, with its label side up.**
5. **Press ⊡ or ►/SELECT button on the remote control.**
   The disc tray closes.
   * When you play a video CD, "VIDEO CD" appears in the display and play starts from the first track.
   * When you play a CD-G, "GRAPHICS" appears in the display and play starts from the first track.
6. **Press KARAOKE to select the output sound — whether the instrumental parts only or both of the instrumental parts and the vocal parts.**

KARAOKE

(Display window)
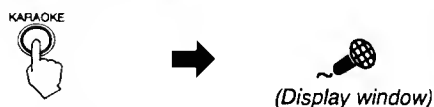
Playing a multiplex sound CD
* This function is used for multiplex sound discs.
* **By pressing the KARAOKE button, channel multiplexing modes are cycled as shown below.**

KARAOKE

┌→ REPLACE → Lch MONO → Rch MONO → V.MASK ┐
└───┘

(Display window)

7. **Turn MIC LEVEL and VOLUME to adjust the microphone level and the sound output level.**
8. **Sing into the microphone.**

To stop during play, press ■ STOP/CANCEL.
The blue screen appears on the TV screen.

To stop play and remove the disc, press ⏏.
After singing, restore the stereo effect by pressing KARAOKE. So, you will not lose the stereo effect when you play a stereo disc next time.

To select the CD graphic channel
If the CD-G has several patterns (up to 15) of graphics (they are called "graphic channels"), you can select the one you want. You can find out whether or not the CD-G has graphic channels by looking at its package or the printed surface of the disc.

To change the graphic channel, press CD-G CHANNEL repeatedly until the graphic channel you want appears on the TV screen.

To apply echo to your voice
Operation
1. **Press DIGITAL ECHO on the remote control while holding down the SHIFT button.**
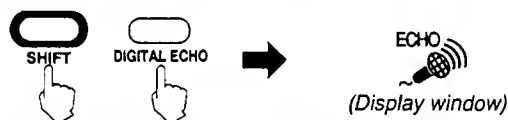
SHIFT   DIGITAL ECHO   ➡   ECHO
(Display window)

2. **Each time you press the button, the amount of echo applied changes and the display shows as follows:**
┌→ D.ECHO 1 → D.ECHO 2 → D.ECHO 3 → OFF ┐
└───┘
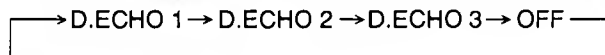
ECHO 1: A little echo is applied.
ECHO 2: More amount of echo than ECHO 1.
ECHO 3: Strong echo is applied.
OFF: No echo is applied.

To select a particular track or to use other basic operations
See "Basic Operations" on page 12.

To record yourself singing along
See "Microphone Mixing" on page 30.

Notes
* **You can use Vocal Masking only on a multiplex Karaoke disc.**
* **To prevent howling and squealing when using the microphone**
  Adjust MIC LEVEL and VOLUME, and try not to point the microphone at the speakers.
* **When you are not going to use the microphone**
  Keep MIC LEVEL set to MIN, and disconnect the microphone.

Singing along with Multiplex Karaoke Video CDs with the PBC function

Before playing a disc, turn on the TV and select the video input so that you can view the pictures from the CD player.

Operation

1. **Turn down MIC LEVEL fully.**
2. **Connect the microphone (not supplied) Into the MIC jack on the front panel.**
3. **Press ▲.**
   The System automatically turns on and disc tray comes out.
4. **Place a disc correctly in the circle of the disc tray, with its label side up and press ▲ again. The disc tray will close.**
5. **Press the disc button next to the disc you want to play.**
6. **When the menu appears on the TV screen, select the song you want by using the number buttons on the remote control unit.**
7. **Press the KARAOKE button to select the output sound — whether the instrumental parts only or both the instrumental parts and the vocal parts.**
   Each time you press the button, the sound changes and the display window shows as follows:

   ┌→V.MASK → REPLACE → Lch MONO → Rch MONO ┐
   └───┘

Lch MONO:	only the instrumental parts
Rch MONO:	only the vocal parts
VOCAL MASK:	vocal is to be muted
REPLACE:	your voice replace the vocal

8. **Turn MIC LEVEL and VOLUME to adjust the microphone level and the sound output level.**
9. **Singing into the microphone.**

To stop Menu Play, select the item in the menu (such as "End" or "Quit") which can quit playback. If there is not such a selection, press and hold RETURN for more than 2 seconds.
To stop play and remove the disc, press ▲.

To apply echo to your voice

Hold down the SHIFT button and press DIGITAL ECHO on the remote control.
Each time you press the button, the amount of echo applied changes and the display shows as follows:

┌──→ECHO 1 → ECHO 2 →ECHO 3 → OFF ─┐
└───────────────────────────────────┘

ECHO 1: A little echo is applied.
ECHO 2: More amount of echo than ECHO 1.
ECHO 3: Strong echo is applied.
OFF: No echo is applied.

To use other operations

See "Various Unique Functions" on page 14.

To use slow motion or frame-by-frame playback for video CDs

Press the **II** STILL button while holding down to SHIFT button on the remote control.

To record yourself singing along

See "Microphone Mixing" on page 30.

Notes
- **You cannot use Vocal Masking on a multiplex karaoke disc.**
- **To prevent howling and squealing when using the microphone**
  Adjust MIC LEVEL and VOLUME, and try not to point the microphone at the speakers.
- **When you are not going to use the microphone**
  Keep MIC LEVEL set to MIN, and disconnect the microphone.

Adjusting music key

Hold down the SHIFT button and press the KEY CONTROL buttons on the remote control (♭ 1 - 6 or # 1 - 6) to change the key In which the music plays.
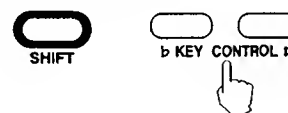
Note
Once the music key is adjusted, the key level will not return to the previous level after playing a song.

USING THE MICROPHONE

You can use the microphone (not supplied) for two kinds of recording.

Microphone mixing

You can record sound through the microphone by mixing sound from other sources.
When recording on deck B, you cannot use deck A as the playing source. (But you can use deck A as the playing source when recording on the connected VCR.)

Operation
1. Turn down MIC LEVEL fully.
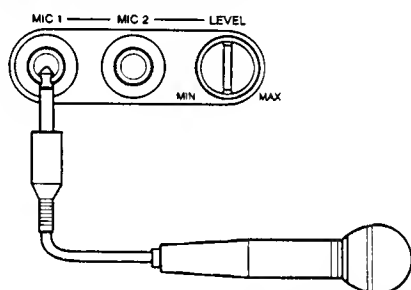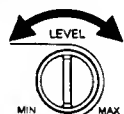2. Connect the microphone (not supplied) into the MIC jack on the front panel.

3. Play the source — a CD, a tape, and others.
4. Turn MIC LEVEL and VOLUME to adjust the microphone level and the sound output level.

5. Sing into the microphone.
6. Start recording.
   You can record using both deck B and the connected VCR.
   When recording on deck B, see "Recording Tapes" on page 23.
   When recording on the VCR, refer to the manual supplied for it.

Recording only though the microphone

You can record sound picked up by the microphone only.
See page 23 to prepare for recording.

Operation
1. Turn down MIC LEVEL fully.
2. Connect the microphone (not supplied) into the MIC jack on the front panel.
3. Turn MIC LEVEL and VOLUME to adjust the microphone level and the sound output level.
4. Press the REC START/STOP button, the indicator turns red and recording will start.

(Front panel)
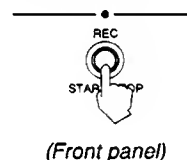
5. Sing into the microphone or pick up sound using the microphone.

Notes
- You can record using both deck B and the connected MD.
- To prevent howling and squealing when using the microphone
  Adjust MIC LEVEL and VOLUME, and try not to point the microphone at the speakers.
- When you are not going to use the microphone
  Keep MIC LEVEL set to MIN, and disconnect the microphone.

Page 30

USING THE TIMER

There are three timers available — Recording Timer, Daily Timer and Sleep Timer.
Before using the timers, you need to set the clock built into the System.

Setting the clock

Setting the clock for the first time
After you plug the system in you need to set the clock before you can set any of the timers.

Operation
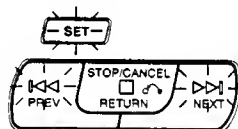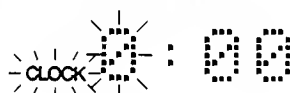1. Press the CLOCK button once.

2. The indicators below will start to blink.

3. Press the ►►I NEXT button to advance the hour. When you reach the right hour press the SET button.
4. Press the ►►I NEXT button to advance the minutes. When you reach the right minute press the SET button.
5. "CLOCK OK" will appear on the display.

Note
Holding down the I◄◄/►►I PREV/NEXT buttons will advance/ decrease the time by 10 minute intervals.
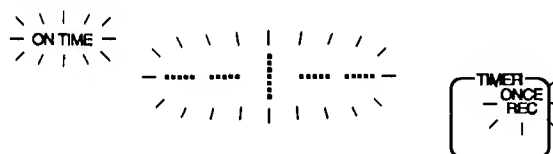
Using Recording Timer

With Recording Timer, you can make a tape of a radio broadcast automatically.
You can set Recording Timer whether the System is turned on or off.

Operation
1. Place a tape in deck B and select the recording direction. See page 23.
2. Choose the radio station you wish to record. (The Player will remember the station.)
3. Press the TIMER button consecutively until "ON TIME" "– –" and "ONCE REC" blink.

4. Use the I◄◄/►►I PREV/NEXT buttons to set the hour and press SET. Then do the same for the minutes and press SET.
5. Use the I◄◄/►►I PREV/NEXT buttons to set the off time in the same way.
6. TIMER OK will appear on the screen and the Recording Timer is set.

To reset the timer after the System has automatically turned off.
Turn the System on and press the timer button until ONCE REC appears in the display, and press SET. The once record timer is set again for the same time, and source.

Notes
* To turn off the Recording Timer, press the Timer button until ONCE REC blinks, and press STOP/CANCEL button. The ONCE RECORD feature is turned off.
   — How Recording Timer actually works —
   The System automatically turns on, tunes into the most recent station, and starts recording on deck B when the timer-on time comes. Then, when the timer-off time comes, the System automatically turns off.
   The timer-on time and timer-off time remain stored in memory until you reset them or disconnect the AC power cord.

Setting the Daily Timer

With Daily Timer, you can wake up to music or your favorite radio program. You can set Daily Timer whether the System is turned on or off.

Operation
1. **Press the TIMER button once.**
   DAILY will start to blink on the display.
2. **Press TIMER once more to set the Daily Timer. The ON TIME and hour spaces will start to blink. Use the |◄◄/ ►►| PREV/NEXT buttons to forward or reverse the hours, and press SET.**
3. **Use the |◄◄/►►| PREV/NEXT buttons again to set the minutes, and press the SET button again.**
4. **The OFF TIME and hour spaces will start to blink. Set the OFF TIME the same way you set the ON TIME.**
5. **After you set the minutes of the OFF TIME, "SOURCE" will appear on the screen. Press the |◄◄/►►| PREV/ NEXT button to select the source you wish to use.**
   To select a source, press the |◄◄/►►| PREV/NEXT buttons and different sources wil blink in the display. When the source you want to use is blinking press the SET button.
   CD: When you choose CD as a source "DISC –" will appear in the display. To choose other discs use the |◄◄/►►| PREV/NEXT buttons. When the correct disc is displayed press the SET button.
          Next "TRACK – –" will appear in the display. Use the |◄◄/►►| PREV/NEXT buttons to choose the track you want to start from.
          Next, "VOLUME" will appear in the screen. Use the |◄◄/►►| PREV/NEXT buttons to choose the volume you want. Now "TIMER OK" will appear in the display and the timer is set.
   TAPE: When you choose tape as a source, "VOLUME" will appear in the display. Adjust the volume with the |◄◄/►►| PREV/NEXT buttons. Now "TIMER OK" will appear in the display. (If tapes are in both decks when the timer comes on the System will play deck B first.)
   FM or AM: When you choose FM or AM as a source, "VOLUME" will appear in the display. Adjust the volume with the |◄◄/►►| PREV/NEXT buttons and press SET. Now "TIMER OK" will appear in the display.

To change the source or time for Daily Timer, press the TIMER button and then press it again and "ON TIME" and the time will start to blink. Now you can reset the timer and source.
To cancel the Daily Timer, press the TIMER button and then press the STOP/CANCEL button while "DAILY" is blinking on the display.
To turn the Daily Timer back on, press the TIMER button and then press the SET button while "DAILY" is blinking on the display.

Note
- **If there is a power failure**
  The clock loses the setting and the display shows "0:00." You need to reset the clock.

Setting the Sleep Timer

With Sleep Timer, you can fall asleep to music.
You can set Sleep Timer when the unit is turned on.

Operation
1. **Press SLEEP on the remote control.**
   The SLEEP indicator starts blinking in the display. Each time you preset the button, the time length changes as follows:

   ┌──────►10 →20 →30 → 60 →90 →120 ──────┐
   └──────────── Canceled ◄────────────┘
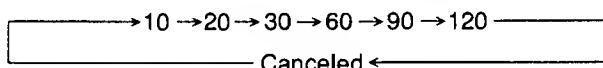
2. **Wait for about 6 seconds after specifying the time length.**
   The SLEEP indicator stops blinking and remains lit.

To check the remaining time until the timer-off time, press SLEEP once so that the remaining time until the shut-off time appears for about 5 seconds.
To change the timer-off time, press SLEEP repeatedly until the desired time length appears in the display.
To cancel the Sleep Timer, press SLEEP repeatedly so that the SLEEP indicator goes off in the display or turn off the System.

Note
The System automatically turns off after the specified time length passes.

Timer priority

Since each timer can be set separately, you may wonder what happens if the setting for these timers overlap.
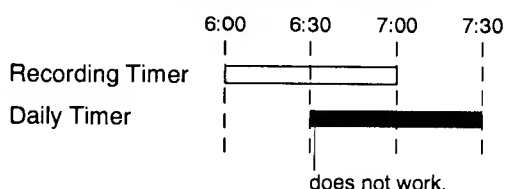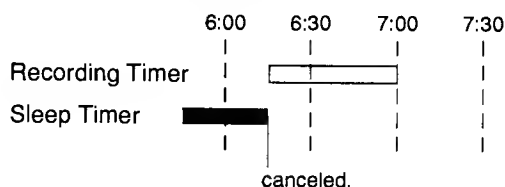Here are the priorities for each timer.

Recording Timer has priority over Daily Timer and Sleep Timer.
If the Daily Timer is set to come on while the Recording Timer is operating, the Daily Timer will not come on at all.

```
                    6:00     6:30     7:00     7:30
                     |        |        |        |
Recording Timer     [▭▭▭▭▭▭▭▭▭]        |
                     |        |        |        |
Daily Timer          |      ████████████████
                     |        |        |        |
                           does not work.
```
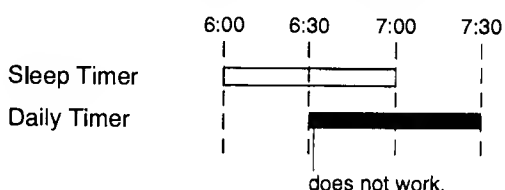
If Recording Timer is set to come on while the Sleep Timer is operating, the Sleep Timer will be canceled several seconds before Recording Timer comes on.

```
                    6:00     6:30     7:00     7:30
                     |        |        |        |
Recording Timer      |     [▭▭▭▭▭▭▭▭▭]          |
                     |        |        |        |
Sleep Timer        ██████     |        |        |
                     |        |        |        |
                        canceled.
```

Sleep Timer has priority over Daily Timer.
If Daily Timer is set to come on while the Sleep Timer is operating, the Daily Timer will not come on at all.

```
                    6:00     6:30     7:00     7:30
                     |        |        |        |
Sleep Timer         [▭▭▭▭▭▭▭▭▭]        |
                     |        |        |        |
Daily Timer          |      ████████████████
                     |        |        |        |
                           does not work.
```

Therefore, the priority is like this —

```
┌─────────────────────────────────────────────────┐
│  Recording Timer > Sleep Timer > Daily Timer     │
└─────────────────────────────────────────────────┘
```

MAINTENANCE

Handling compact discs

When handling a compact disc, do not touch the surface of the disc (reflective silver side — the side without the label).
Since compact discs are made of plastic, they are easily damaged. If a disc gets dirty, dusty, scratched or warped, the sound will not be picked up correctly and, in addition, such a disc may cause the CD player to malfunction.
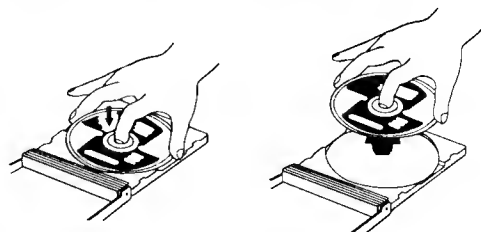
Even on label side
Do not damage the label side, stick paper to or use any adhesive on its surface.

Storage
Make sure that discs are kept in their cases. If discs are piled one on top of another without their protective cases, they can be damaged. Do not put discs in a location where they may be exposed to direct sunlight, or in a place where the humidity or temperature is high. Avoid leaving discs in your car!

Maintenance of discs
If there are fingerprints or other dirt adhering to a disc, wipe it with a soft dry cloth, moving from the center outwards.
If a disc is difficult to clean, wipe it with a cloth moistened with water. Never use record cleaners, petrol, alcohol or any anti-static agents.
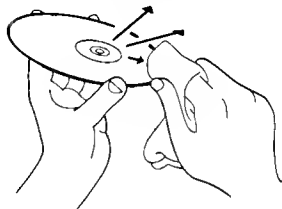
> **CAUTION**
> Sometimes during play noise or images may be garbled. This is sometimes due to the disc. (It may not be up to industry standards.)
> These symptom are caused by the discs, not by the malfunction of the System.
> DO NOT use any solvent — such as conventional record cleaner, spray, thinner, or benzine — to clean the disc.

Handling cassette tapes

- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.

- Be careful not to touch the tape surface.

- Avoid the following places to store the tape:
  — In dusty places
  — In direct sunlight or heat
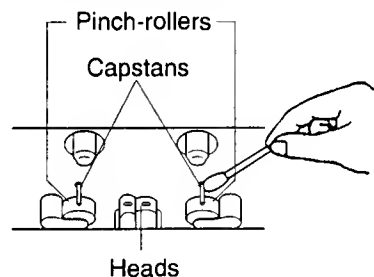 — In moist areas
  — Near a magnet

Cassette decks

If the heads, capstans, and pinch-rollers of the cassette decks become dirty, the following will occur:
- Impaired sound quality
- Discontinuous sound
- Fading
- Incomplete erasure
- Difficulty in recording

To clean the heads, capstans, and pinch-rollers
Use a cotton swab moistened with alcohol.

Pinch-rollers

Capstans

Heads

To demagnetize the heads
Turn off the unit, and use a head demagnetizer (available at electronics and record shops).

TROUBLESHOOTING

☐ Troubleshooting

If you are having a problem with your System, check this list for
a possible solution before calling for service.
If you cannot solve the problem from the hints given here, or
the System has been physically damaged, call a qualified
person, such as your dealer, for service.

Symptom	Cause	Action
No sound is heard.	Connections are incorrect or loose.	Check all connections and make corrections. (See pages 2 to 4.)
Hard to listen to broadcasts because of noise.	• Antennas are disconnected. • The AM loop antenna is too close to the System. • The FM antenna is not properly extended and positioned.	• Reconnect the antennas correctly and securely. • Change the position and direction of the AM loop antenna. • Extend the FM antenna at the best position.
The disc sound is discontinuous.	The disc is scratched or dirty.	Clean or replace the disc. (See page 1.)
The disc sound loses stereo effect.	The Lch MONO mode is activated.	Press KARAOKE on the front panel to restore the stereo effect.
The pictures from the CD player is distorted.	When you pause or advance the pictures manually, the pictures are distorted. This is not a malfunction.	———
The disc tray does not open or close.	The AC power cord is not plugged in.	Plug the AC power cord.
The disc does not play.	The disc is placed upside down.	Place the disc with the label side up.
The cassette holders cannot be opened.	Power supply from the AC power cord has been cut off while the tape was running.	Turn on the System.
Impossible to record.	Small taps on the back of the cassette are removed.	Cover the holes with adhesive tape.
Operations are disabled.	The built-in microprocessor may malfunction due to external electrical interference.	Unplug the AC power cord and then plug it back in.
Unable to operate the System from the remote control.	• The path between the remote control and the remote sensor on the unit is blocked. • The batteries are exhausted.	• Remove the obstruction. • Replace the batteries.

SPECIFICATIONS

CA-V605T

Amplifier

Output power (IEC268-3/DIN)	47 watts per channel, min. RMS, both channels driven into 6Ω at 1kHz with no more than 0.9% total harmonic distortion.	
Audio input sensitivity and impedance (at 1kHz)	MD/DCC AUX MIC 1, MIC 2	900mV/47kΩ 300mV/47kΩ 2.0mV/10kΩ
Audio output level/Impedance (at 1kHz)	MD/DCC	200mV/2.0kΩ
Video output level (at 1 Vp-p input)	VIDEO OUT	1.0Vp-p/75Ω
Speakers/ Impedance	SPEAKERS	6 – 16Ω

Tuner

FM tuning range	87.50 – 108.00MHz
AM tuning range	531 – 1602kHz (at 9kHz channel spacing) 530 – 1600kHz (at 10kHz channel spacing)

Cassette deck

Frequency response	Normal (type 1) CrO2 (type 2)	30 – 15000Hz 30 – 16000Hz
Wow and flutter	+0.3% W.PEAK (EIAJ) 0.15% WRMS	

CD player

Wow and flutter	Unmeasurable
Available disc type	Audio CD, CD-G, video CD

General

Power requirements	AC110/127/220/230 – 240V ∿ , adjustable with the voltage selector, 50/60Hz
Power consumption	110 watts (during operation) 20 watts (during standby)
Max. power consumption	380 watts (Taiwan only)
Dimensions (approx.)	245 × 270 × 302.5 mm (W/H/D) 9 11/16 × 10 11/16 × 11 15/16 in.
Mass (approx.)	6.3 kg (13.9 lbs.)